

Work Order ID 110439

December-19-13 2:44:44 PM

\*110439\*

Page 1

Item ID: D206-642-241

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Stop

\*NS2\*

Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 1/02/14 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 13-12-19

Tooling:

Date:

Run Start

\*NR1\*

QC: Date: SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2650

Rev F(DEO)

100

0.00

\*100\*

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-241

CHG006

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Page 2

Item ID: D206-642-241

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 1/02/14 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

110

0.00

\*110\*

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Deburr Fwd edge of tube

2- Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

Pick:

Qty Part Number Description Batch

A/R Aluminum Rod M127069

4-Grind weld flush to cap on top surface only.

5-Cut Aft end as per dwg 2650 from front of tube and Deburr

6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D2650

7-Open holes for Aft end cap as per Dwg D2650 with #30 Drill Bit using DT8025.

8-Drill pilot holes using Dt 8167.

9-Locate DT8732 from inner Aft saddle hole &amp; 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 &amp; D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 &amp; doubler leaving DT8732 for added support.

10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.

DC 13/12/30

13-12-31 PD

mm 13/12/31

DC 14/01/02

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Item ID: D206-642-241

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Stop **\*NS2\***Start Date: 12/19/13 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 1/02/14 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D2650

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D2650

15-C'sink GHW rivet holes as per Dwg D2650

16-Open crossbolt holes to Ø0.3125"

17-Drill pilot holes using DT8028-3, then open to Ø0.297" as per Dwg D2650. Open Aft cap hole #6.

18- Ream crossbolt spacer holes to finished size as per Dwg D2650, D2650-3  
Drilling Detail \*\*\*DO NOT OPEN X-BOLT SPACER HOLE OF DETAIL B\*\*\*

19-Deburr tube as per QSI 018 and blow out chips from inside the tube

DC 14/01/02





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Item ID: D206-642-241

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\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 1/02/14 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150 QC7-Inspect Chemical Conversion Coat 0.00

\*150\*

QC Memo 0.00

Quality Control

1 14-01-03

160 Skidtubes 0.00

\*160\*

Skidtubes Memo 0.00

Skidtubes 1- Open and c/sink one crossbolt spacer holes as per Dwg D2650 (DEO Detail B)(without cutting fluid)

2-Deburr and blow out all chips from inside the tube

DC 14/01/03



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Item ID: D206-642-241

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**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Stop **\*NS2\***

Start Date: 12/19/13 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 1/02/14 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

180

0.00

**\*180\***

Skidtubes

0.00

Skidtubes

Memo

1-Locate, install and rivet doublers as per Dwg D2650. Micro-shave rivets as required

2-Bond D2654-3 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting

Start Date: 14/01/03 Time: 11:20

Finish Date: 14/01/07 Time: 10:00

Pick:

Qty Part Number Description Batch

A/RSikaflex-291 127097

Sikaflex expire date: 14/08/16

DC 14/01/03

190

QC5- Inspect part completeness to step on W/O

0.00


**\*190\***

QC

Memo

0.00

Quality Control

1 14/01/07 



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Item ID: D206-642-241

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 1/02/14 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

200

0.00

**\*200\***

Skidtubes

Skidtubes

**Memo**

0.00

1-Remove alodine in one area per DEO detail B from around hole and prepare for welding

2-Prep per QSI 005 and Insert one D2649 crossbolt spacer. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

QtyPart NumberDescriptionBatch

A/RAluminum Rod m1d2324

3-Grind welds flush as per Dwg D2650.

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D2650. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/RSS Rod NONE

5-Insert D4720-1 Spacer. Swage to 0.313" X 0.75" DP per QSI 002. Trim and grind flush per QSI 002

6-Install D2680-041 Nut Plate as per Dwg D2650

2E14/01/07

mm

14/01/07

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Item ID: D206-642-241

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**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 1/02/14 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
<b>*220*</b>									DAS
QC	Memo	0.00							9
Quality Control									9-80
230	QC5- Inspect part completeness to step on W/O	0.00							
<b>*230*</b>									DAS
QC	Memo	0.00							9
Quality Control									9-80
240	Pressure Wash per QSI005 4.3	0.00							
<b>*240*</b>									
HandFinish	Memo	0.00							
Hand Finishing	Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.								

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## Quality Control

# Work Order ID 110439

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Item ID: D206-642-241 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Replacement Skidtube, High Gear(Fits LH or RH)  
 Start Date: 12/19/13 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 1/02/14 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270	HandFinishing	0.00							
<b>*270*</b>	HandFinish	0.00							
Hand Finishing	<p><b>Memo</b></p> <p>1- Install inserts &amp; wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate. A/RSikaflex-291 <u>M 127 097</u> Sikaflex expire date: <u>1/10/8</u></p> <p>2-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D2650 (D2650-3 detail). Clean excess adhesive.</p> <p>3-Install MS27039-4-06 Screw as per DEO 9153.</p> <p>4 -Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive A/RSikaflex-291 <u>M 127 097</u> Sikaflex expire date: <u>1/10/8</u></p> <p>5 -Wing Walk as per Dwg D2650-3 and QSI 005 4.4 A/R Batch: <u>M 128 102</u></p>								
300	QC5- Inspect part completeness to step on W/O	0.00							
<b>*300*</b>	QC	0.00							
Quality Control	<b>Memo</b>								

DAS  
27  
3-19  
14/2/11

1 x 6 14/02/05

J

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\*110439\*

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Item ID: D206-642-241

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13 Start Qty: 1.00 \*1\*

Cust Item ID:

Required Date: 1/02/14 Req'd Qty: 1.00 \*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

310

0.00

\*310\*

Packaging

0.00

Packaging

Memo

Identify and pack for shipping as per PPP D206-642-241

Location: \_\_\_\_\_

PPP Rev: \_\_\_\_\_

PPP 110440

1 14-02-12

320

0.00

\*320\*

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

Quality Control

14-02-13

14-02-12

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Work Order ID: 110439

**\*110439\***

Parent Item: D206-642-241

**\*D206-642-241\***

Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev: 04.12.02 Revised procedural stepsKJ/JLM IPP RevP: revise  
and update route/bom DD 10.01.06 verf:ECIPP rev Q 10.02.19 per PAR  
09-043 EC verified by: DD IPP Rev:R 12.11.22 now swage per ecn12-  
679 DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2620		Manufactured	No			110	Each	12.0000	1	1			
<b>*D2620*</b>									**			mm 13/12/31	
Skidtube, 206 Skidtube													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				LG002		12							
				108384		12				1			
D4720-1		Manufactured	No			200	Each	428.0000	17	17			
<b>*D4720-1*</b>									**			mm 14/01/07	
Spacer													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				LG001		428							
				103902		428				17			
D3286-1		Manufactured	No			110	Each	97.0000	2	2			
<b>*D3286-1*</b>									**			DL 14/01/02	
Doubler													
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				LG001		97							
				90503		9				2			
				91158		88							

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Work Order ID: 110439

**\*110439\***

Parent Item: D206-642-241

**\*D206-642-241\***

Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

D2647      Manufactured      No      110      Each      22.0000      1      1

**\*D2647\***

Cap

**\*\***

1312-31 PD

Location

Loc Qty

Loc Code

LG001

22

102371

7

107588

15

①

D2654-3

Manufactured      No

180      Each

7.0000

1

1

**\*D2654-3\***

Web

**\*\***

DC 14/01/03

Location

Loc Qty

Loc Code

LG002

7

105172

3

109991

4

①

CR3212-4-04

Purchased      No

180      Each

932.0000

52

52

**\*CR3212-4-04\***

Cherry Rivet

**\*\***

DC 14/01/03

Location

Loc Qty

Loc Code

ST327

123

123265

123

st552

809

m126534

62

m126691

747

①

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**\*110439\***

Parent Item: D206-642-241

**\*D206-642-241\***

Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

200

Each

419.0000

1

1

**\*D2649\***

Cross Bolt Spacer

\*\*

*BE 14/01/07*

Location

Loc Qty

Loc Code

LG001

419

107906

208

108633

176

90497

6

93662

28

D3286-3

Manufactured No

200

Each

137.0000

2

2

**\*D3286-3\***

Spacer

\*\*

*BE 14/01/07*

Location

Loc Qty

Loc Code

LG001

137

109097

61

91160

76

D2680-041

Manufactured No

Each

16.0000

1

**\*D2680-041\***

Nut Plate

\*\*

*mm 14/01/07*

Location

Loc Qty

Loc Code

ST014

16

108819

16

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Parent Item: D206-642-241

**\*D206-642-241\***

Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

Each

825.0000

2

**\*CR3212-4-03\***

Cherry Rivet

\*\*

mm 14/01/07

Location

Loc Qty

Loc Code

ST327

725

114889

7

119017

700

123265

18

st552

100

m114859

100

CCR264SS3-3

Purchased

No

Each

422.0000

2

**\*CCR264SS3-3\***

Cherry Rivet

\*\*

mm 14/01/07

Location

Loc Qty

Loc Code

ST327

422

m126474

222

m126282

200

m126333

200

D2646

Manufactured

No

270

Each

46.0000

1

1

**\*D2646\***

Aft Cap

\*\*

11/02/05

Location

Loc Qty

Loc Code

FG

4

85848

2

90495

2

FP001

42

103306

18

107857

24

3110816

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Parent Item: D206-642-241

**\*D206-642-241\***

Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

D2651-1      Manufactured      No      270      Each      428.0000      18      18

**\*D2651-1\***

**\*\***

Plug

Location

Loc Qty

Loc Code

FP001

428

B111875

X16

103305

30

103858

64

104843

199

X2

106456

135

NAS1149D0463J

Purchased

No

270

Each

484.0000

1

1

**\*NAS1149D0463.J\***

**\*\***

WASHER

44 14/02/04

Location

Loc Qty

Loc Code

ST510a

484

M127693

484

X1

D2651-3

Manufactured

No

270

Each

550.0000

18

18

**\*D2651-3\***

**\*\***

O-Ring

44 14/02/05

Location

Loc Qty

Loc Code

FP001

550

102315

60

104725

330

108583

160

X18

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Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-08

Purchased

No

270

Each

980.0000

46

46

**\*MS27039-1-08\***

**\*\***

*Handwritten: 1102105*

Screw

Location

Loc Qty

Loc Code

GA

63

*Handwritten: M127813*

*Handwritten: vdc*

m125654

63

st507

917

m126319

417

m127255

500

ALS4-1032-130

Purchased

No

270

Each

2,255.000

44

44

**\*ALS4-1032-130\***

**\*\***

*Handwritten: 1136319 (x4) 1102105*

Rivnut

*Handwritten: [D3683-1] OK per CP 14-02-05*

Location

Loc Qty

Loc Code

st510

1917

M126109

1917

st555

338

M127028

338

MS27039-4-06

Purchased

No

270

Each

100.0000

1

1

**\*MS27039-4-06\***

**\*\***

*Handwritten: 1102105*

Screw

Location

Loc Qty

Loc Code

ST306

100

m126534

100

*Handwritten: XI*



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Parent Item: D206-642-241

**\*D206-642-241\***

Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0332J

Purchased

No

270

Each

2,309.000

46

46

**\*NAS1149D0332.J\***

Washer

**\*\***

*ju 12/02/08*

Location

Loc Qty

Loc Code

ST293

837

m127431

837

ST294

72

m125807

72

ST510a

1400

m127374

400

m127389

1000

*24/6*

D3537-1

Manufactured

No

270

Each

20.0000

4

4

**\*D3537-1\***

Wearpad

**\*\***

*ju 12/02/05*

Location

Loc Qty

Loc Code

FG

18

79833

8

88562

10

FP001

2

108118

2

*B111594*

*yd*

D3537-3

Manufactured

No

270

Each

22.0000

1

1

**\*D3537-3\***

Wearpad

**\*\***

*ju 12/02/10*

Location

Loc Qty

Loc Code

FG

8

86237

8

FP002

14

103014

14

*B111825*

*xl*

December-19-13 2:44:48 PM

Shop Packet Print

Page 7

# Picklist Print

December-19-13 2:44:48 PM

Page 8

Work Order ID: 110439

**\*110439\***

Parent Item: D206-642-241

**\*D206-642-241\***

Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

D3535-13 Manufactured No

270 Each 4.0000 1 1

**\*D3535-13\***

Stainless Steel Wearplate Fwd

**\*\***

HL 12/02/05

Location

Loc Qty

Loc Code

FG

2

B110348

XL

86229

2

FP001

2

102261

2

D3536-13 Manufactured No

270 Each 10.0000 1 1

**\*D3536-13\***

Gasket Fwd

**\*\***

HL 12/02/05

Location

Loc Qty

Loc Code

FG

6

B110777

XL

81344

2

89686

4

FP001

4

108532

4

D3535-21 Manufactured No

270 Each 12.0000 1 1

**\*D3535-21\***

Stainless Steel Wearplate Center Fwd

**\*\***

HL 12/02/05

Location

Loc Qty

Loc Code

FP001

12

102342

12

XL

D3536-21 Manufactured No

270 Each 14.0000 1 1

**\*D3536-21\***

Gasket Center

**\*\***

HL 12/02/05

Location

Loc Qty

Loc Code

FP001

14

104203

14

B99286

XL

December-19-13 2:44:48 PM

Shop Packet Print

Page 8

# Picklist Print

December-19-13 2:44:48 PM

Page 9

Work Order ID: 110439

**\*110439\***

Parent Item: D206-642-241

**\*D206-642-241\***

Parent Item Name: Replacement Skidtube, High Gear(Fits LH or RH)

Start Date: 12/19/13

Required Date: 1/02/14

Start Qty: 1.00

Required Qty: 1.00

D3535-33

Manufactured No

270

Each

3.0000

1

1

**\*D3535-33\***

Stainless Steel Wearplate Aft

**\*\***

Location

Loc Qty

Loc Code

FP002

3

B110205

98973

3

D3536-33

Manufactured No

270

Each

7.0000

1

1

**\*D3536-33\***

Gasket Aft

**\*\***

Location

Loc Qty

Loc Code

FP001

7

101835

7

December-19-13 2:44:48 PM

Shop Packet Print

Page 9



QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

# NOTES:

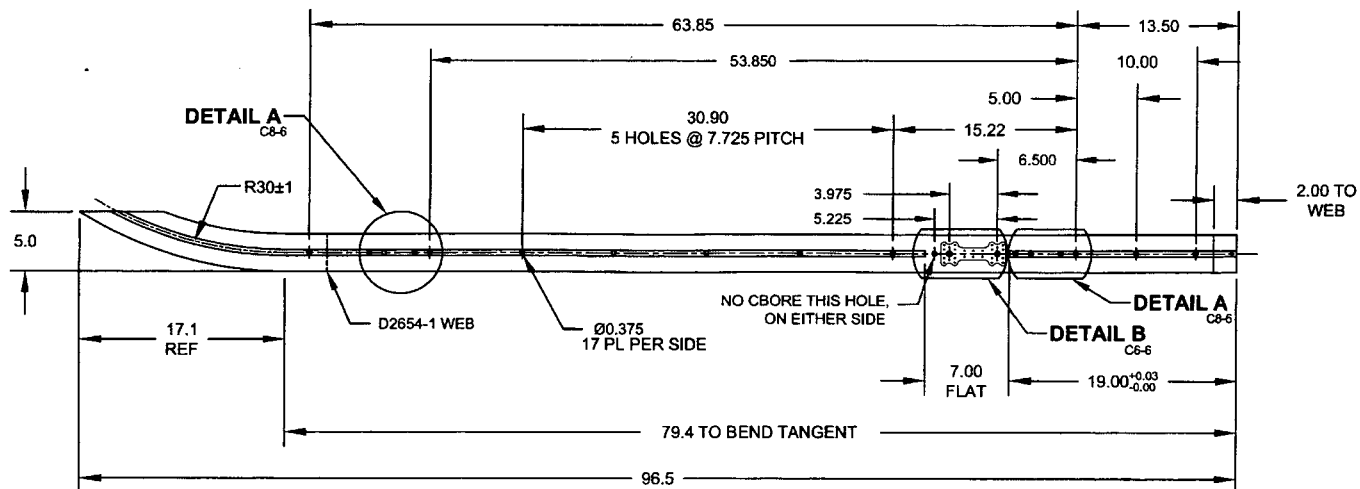
- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3  
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

110439 MJS  
13-12-19

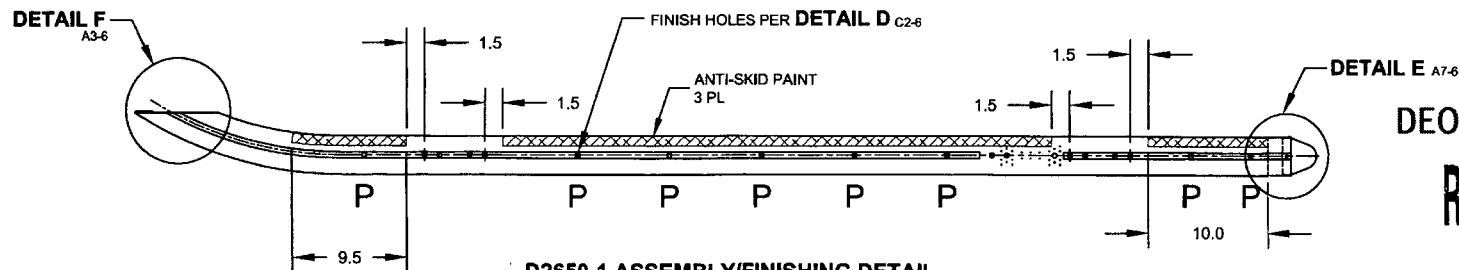
DEO ATTACHED

RELEASED  
08-07-23 MJS

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	RMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW; INCCRP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
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**D2650-1 BENDING/DRILLING DETAIL**

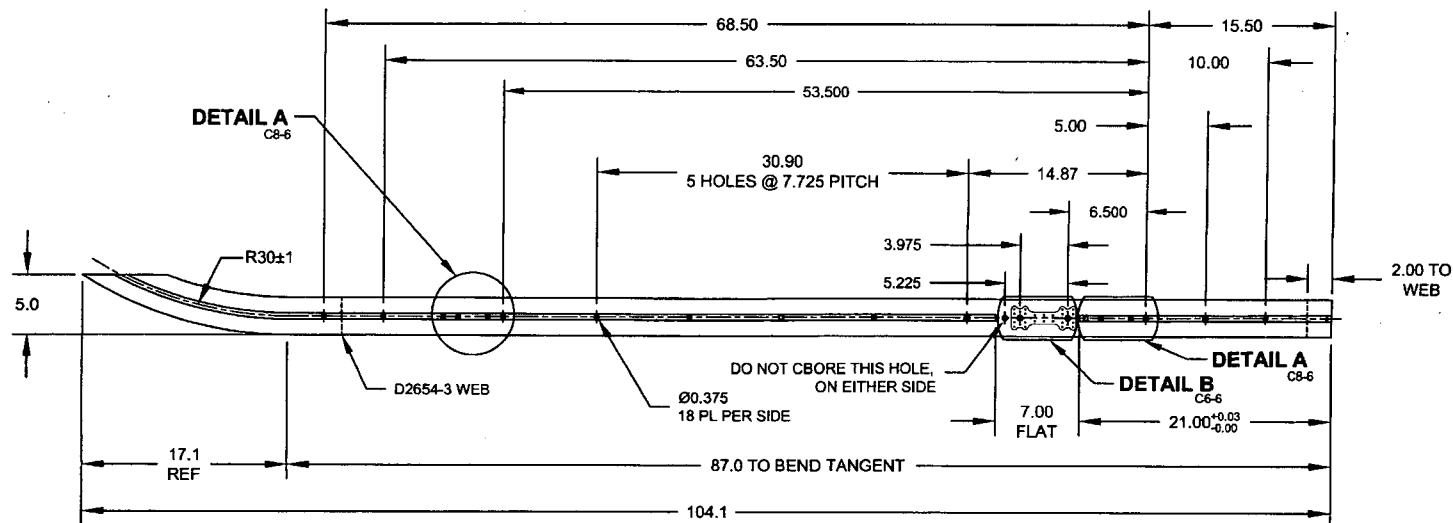


**D2650-1 ASSEMBLY/FINISHING DETAIL**

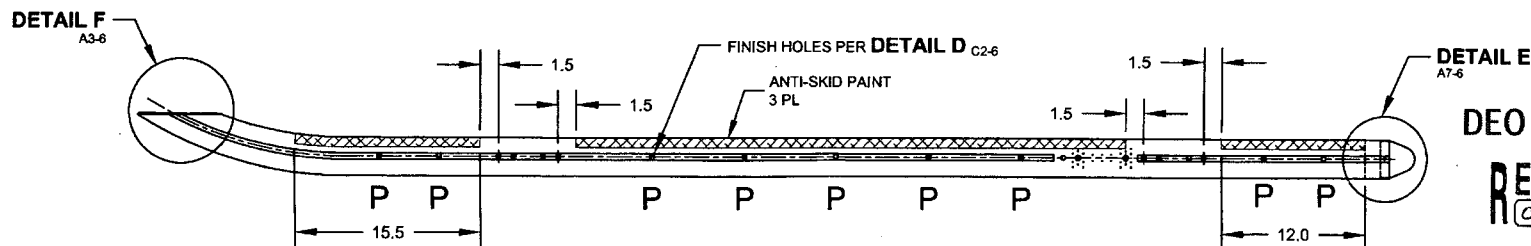
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RELEASED  
68 07 22 117

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DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
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**D2650-3 BENDING/DRILLING DETAIL**

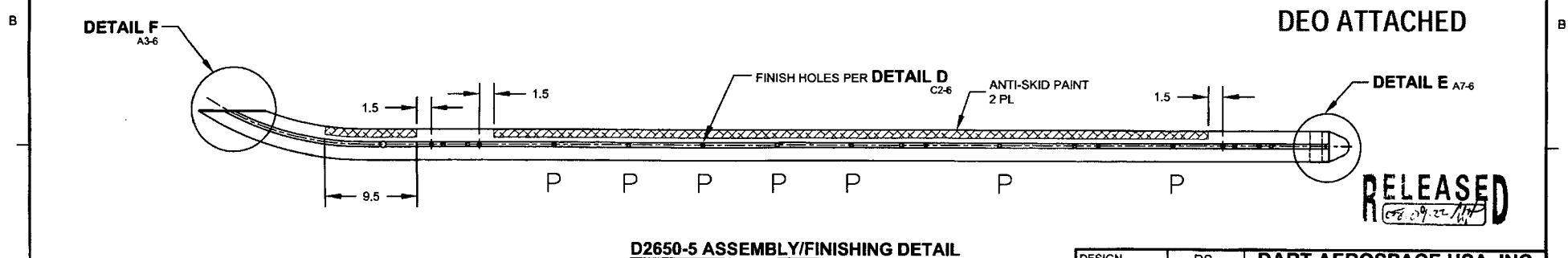
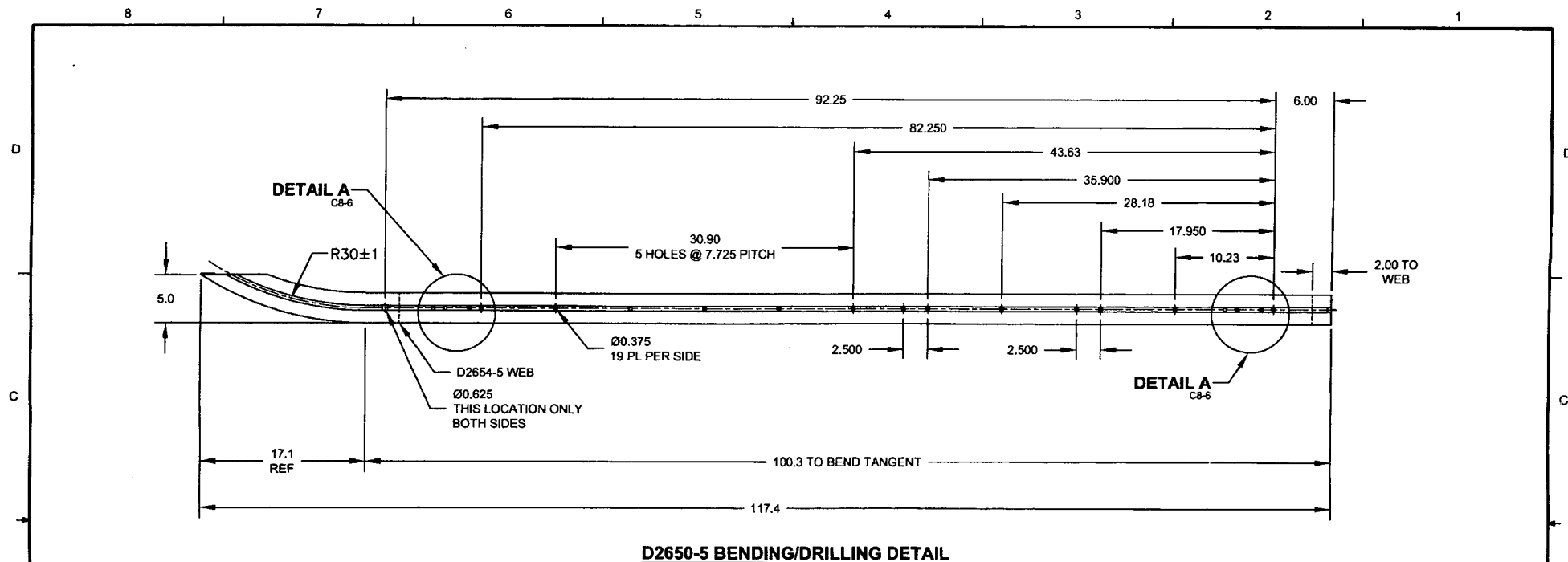


**D2650-3 ASSEMBLY/FINISHING DETAIL**

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RELEASED  
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MFG. APPR.		D2650	SHEET 3 OF 6
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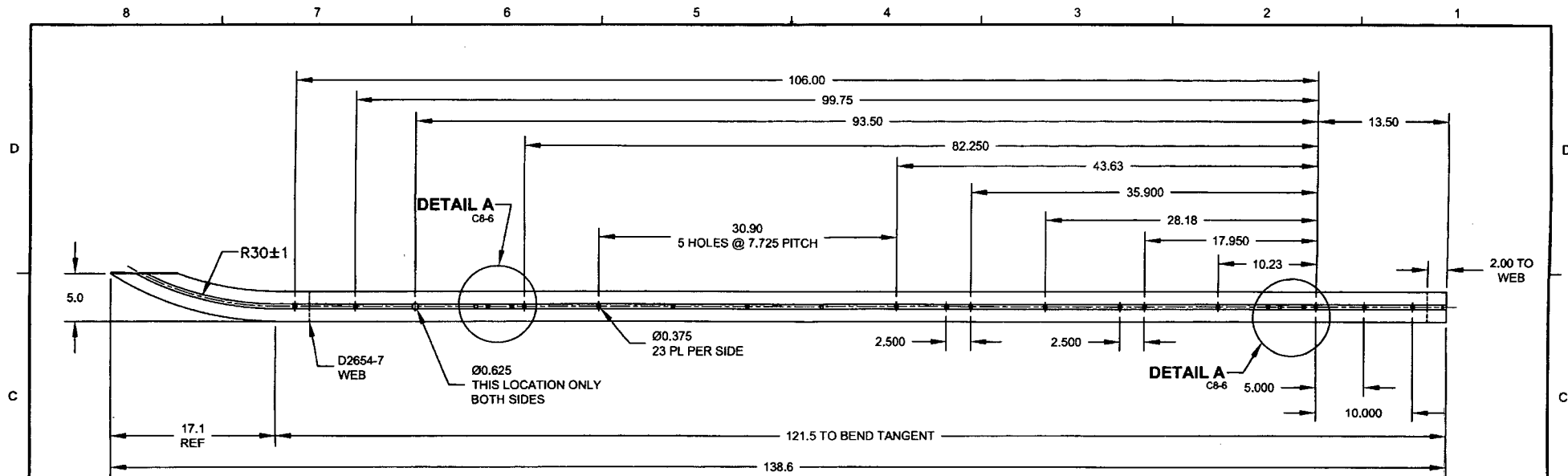




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RELEASED  
08.08.08

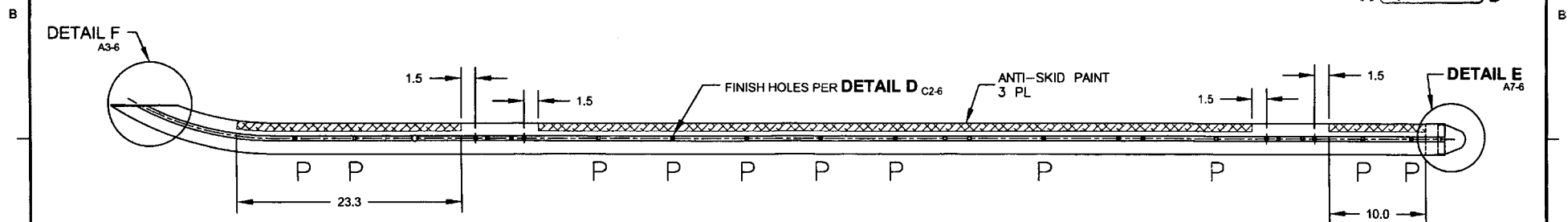
DESIGN	DS	<b>DART AEROSPACE USA, INC</b>	
DRAWN	A/S	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 4 OF 6
APPROVED		TITLE	SCALE
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**D2650-7 BENDING/DRILL DETAIL**

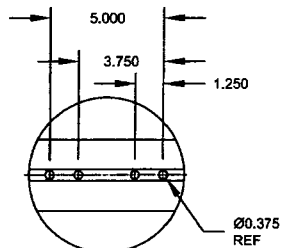
DEO ATTACHED

**RELEASED**  
02 07 22 111

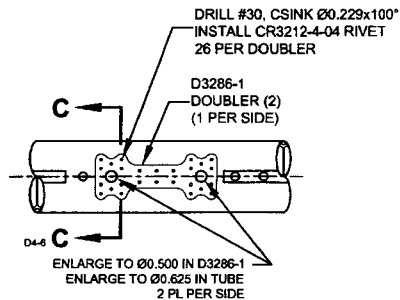


**D2650-7 ASSEMBLY/FINISHING DETAIL**

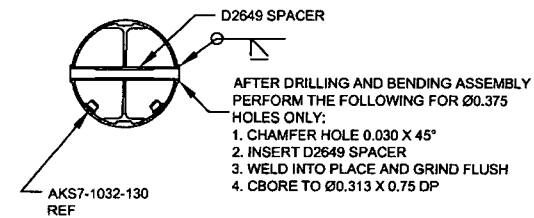
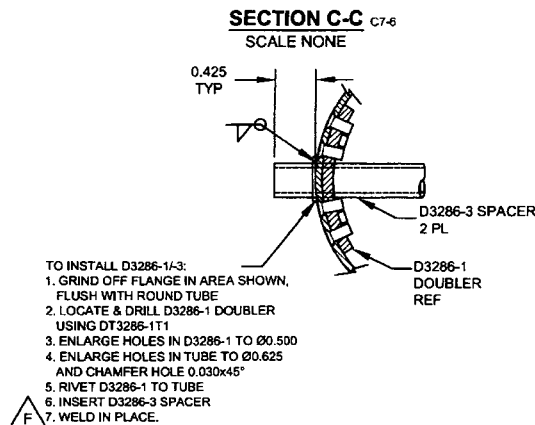
DESIGN	DS	<b>DART AEROSPACE USA, INC</b>	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 5 OF 6
APPROVED		TITLE	SCALE
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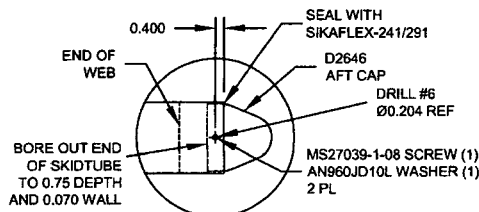
**DETAIL A**  
SCALE 2X  
C2-2  
D7-2  
C2-3  
D7-3  
C2-4  
D7-4  
C2-5  
D6-5



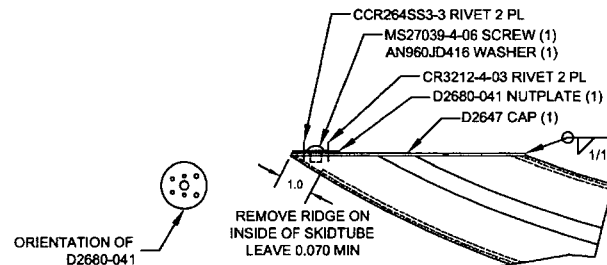
**DETAIL B**  
SCALE 2X  
C3-2  
C3-3



B4-2  
B4-3  
B4-4  
B4-5



**DETAIL E**  
SCALE 2X  
B2-2  
B2-3  
B1-4  
B1-5



**DETAIL F NOTES:**  
1. CUT TUBE LEVEL  
2. REMOVE RIDGE ON FWD SIDE  
3. LOCATE D2647 (TRIM AS NECESSARY)  
4. WELD D2647 IN PLACE PER DART QSI 004  
5. GRIND FLUSH  
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

**RELEASED**  
DEO ATTACHED

DESIGN	DS	<b>DART AEROSPACE USA, INC</b>	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 6 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
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DRAWING NO. D2650	TITLE 206/407 SKIDTUBE ASSEMBLIES	REV. F	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D2650-F-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>IP</i>	CHECKED A.P.	MFG. APPR. <i>AA</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 12.10.12	DATE 12.10.22	DATE 12.10.22	DATE 12.10.22		DATE 12.10.22		

**PURPOSE:**

CHANGE C'BORED WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

**CHANGE:**

PARTS LIST IS AMENDED AS FOLLOWS:

IS:

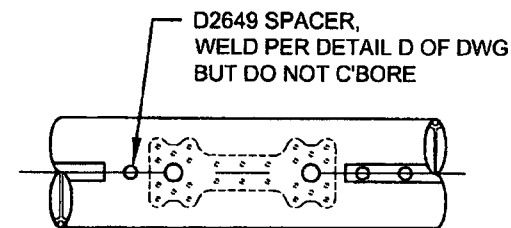
QTY	QTY	QTY	QTY	PART NUMBER	DESCRIPTION
-1	-3	-5	-7		
1	1	0	0	D2649	CROSS BOLT SPACER
16	17	19	23	D4720-1	SPACER

WAS:

17	18	19	23	D2649	CROSS BOLT SPACER
----	----	----	----	-------	-------------------

ADD DETAIL G BELOW, WHICH IS THE SAME SECTION VIEW AS DETAIL D OF DWG.

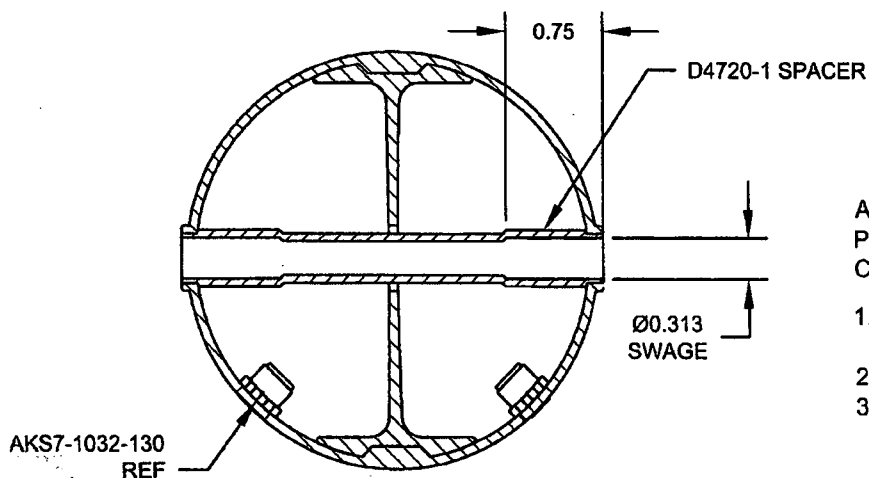
C'BORED HOLES ARE **NOW SWAGED** PER DETAIL G BELOW. FOR THE Ø0.375 HOLE THAT IS NOT C'BORED, WELD PER DETAIL D OF DWG (SEE AMENDED DETAIL B FOR REFERENCE).



**DETAIL B**

AMENDMENT TO DETAIL B  
NOT TO SCALE

RELEASED  
2012-11-16  
*[Signature]*



**DETAIL G**

FOR Ø0.375 HOLES ONLY

FOR HOLES THAT ARE CURRENTLY C'BORED ONLY  
NOT TO SCALE

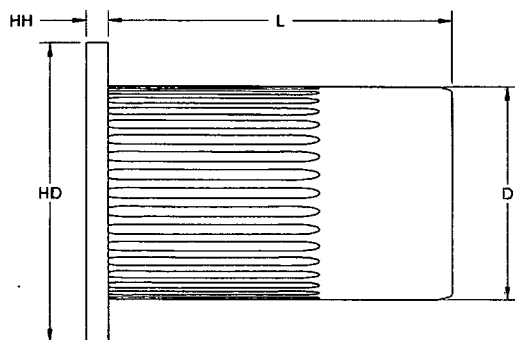
AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.375 HOLES THAT ARE  
CURRENTLY C'BORED:

1. INSERT D4720-1 SPACER, 16 PL (-1) OR 17 PL (-3)  
OR 19 PL (-5) OR 23 PL (-7)
2. SWAGE TO Ø0.313 X 0.75 DP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

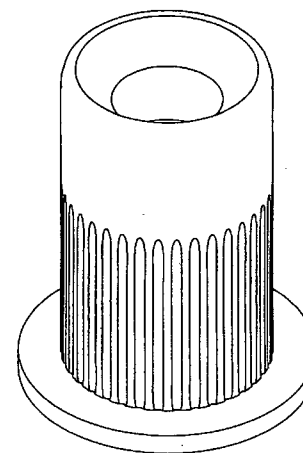
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# SPECIFICATION CONTROL DRAWING



**D3683-X INSERT**



DART P/N	THREAD SIZE	"D" MAX	"HD" ±0.015	"HH"	"L" ±0.015	POSSIBLE SUPPLIERS
D3683-1	#10-32	Ø0.296	Ø0.415	0.030	0.475	AVIBANK MFG INC P/N: ALS7-1032-130 ALS4-1032-130 AKS7-1032-130 AKS4-1032-130 ATLAS ENGINEERING: AELS-1032-130 SPAENAU INC: 215-074
D3683-3	1/4-28	Ø0.390	Ø0.500	0.030	0.580	AVIBANK MFG INC P/N: ALS7-428-165 ALS4-428-165 AKS7-428-165 AKS4-428-165 ATLAS ENGINEERING: AELS-428-165 SPAENAU INC: 215-076

## NOTES:

- 1) MATERIAL: C-1010 OR C-1008 STEEL
- 2) FINISH: CAD PLATED PER QQ-P-416 TYPE II (GOLD) CLASS 2 WITH CLEAR PROTECTIVE COATING OR ZINC YELLOW PLATED PER ASTM-B633, FE/ZN 8, TYPE II WITH CLEAR PROTECTIVE COATING (OPTIONAL)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) THREADS: UNIFIED, CLASS 2B PER ASME B1.1
- 9) A CERTIFICATE OF CONFORMITY IS REQUIRED FROM THE MANUFACTURER TO VERIFY MATERIAL, FINISH, AND THREADS ARE PER THIS DWG

**RELEASED**  
09/07/11

B	ADDED P/N D3683-3	RF	09.03.30
A	NEW ISSUE	DC	07.11.21
REV.	DESCRIPTION	BY	DATE
DESIGN	DC	DART AEROSPACE USA, INC.	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		D3683	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		INSERT	NTS
DATE	09.03.30	COPYRIGHT © 2007 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	